

Appl. No. 10/756,820
Attorney Docket No. 5915 P 005
Page 2 of 10

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A cabinet [[for]] housing computer devices, the cabinet comprising:

an internal chamber defined by a [[side]] wall arrangement having at least a front wall a front door with a lower permeable segment and a rear door with a permeable segment that constitutes a substantial area of the rear door, wherein the rear permeable segment permits air discharge;

a support structure configured to receive a plurality of computer devices, the support structure positioned within the internal chamber;

a substantially vertical duct defining an air distribution passageway for air distribution, the vertical duct positioned within the internal chamber, the vertical duct having a plurality of air discharge ports in fluid communication with the passageway, wherein each discharge port comprises an adjustable nozzle that can be selectively adjusted to control the quantity and direction of air flowing through the nozzle; and,

an inlet fan in fluid communication with the passageway, the inlet fan positioned within the internal chamber to draw air through the front permeable segment, wherein the air is ultimately expelled through the permeable segment of the rear door.

2. (Original) The cabinet of claim 1 wherein the vertical duct is positioned proximate the support structure.

Appl. No. 10/756,820
Attorney Docket No. 5915 P 005
Page 3 of 10

3. (Original) The cabinet of claim 2 wherein the vertical duct is positioned between the side wall arrangement and the support structure.
4. (Original) The cabinet of claim 1 wherein the inlet fan is positioned proximate the support structure.
5. (Original) The cabinet of claim 4 wherein the inlet fan is positioned between the side wall arrangement and the support structure.
6. (Original) The cabinet of claim 1 wherein the front wall is a door with a lower permeable segment, and wherein the inlet fan is positioned to draw air through the permeable segment.
7. (Original) The cabinet of claim 1 further comprising a generally horizontal duct positioned between the inlet fan and the vertical duct, wherein the horizontal duct is in fluid communication with the inlet fan and the vertical duct.
8. (Canceled)
9. (Original) The cabinet of claim 1 further comprising a second substantially vertical duct defining a second passageway for air distribution, the second duct positioned within the internal chamber, the second duct having a plurality of air discharge ports in fluid communication with the second passageway.
10. (Original) The cabinet of claim 9 further comprising a second inlet fan in fluid communication with the second passageway, the second inlet fan positioned within the internal chamber.
11. (Original) The cabinet of claim 9 wherein the second vertical duct is positioned proximate the support structure.

Appl. No. 10/756,820
Attorney Docket No. 5915 P 005
Page 4 of 10

12. (Original) The cabinet of claim 11 wherein the second vertical duct is positioned between the side wall arrangement and the support structure.
13. (Original) The cabinet of claim 10 wherein the second inlet fan is positioned proximate the support structure.
14. (Original) The cabinet of claim 13 wherein the second inlet fan is positioned between the side wall arrangement and the support structure.
15. (Currently Amended) A cabinet [[for]] housing computer servers, the cabinet comprising:

an internal chamber of the cabinet defined by a [[side]] wall arrangement having at least a front wall a front door with a lower permeable segment and a rear door with a permeable segment that constitutes a substantial area of the rear door, wherein the rear permeable segment permits air discharge;

a support structure configured to receive a plurality of servers, the support structure positioned within the internal chamber of the cabinet; and,

an air distribution device positioned within the internal chamber, the air distribution device having a vertical duct defining a passageway, the air distribution device further having a plurality of air discharge ports in fluid communication with the passageway wherein each discharge port comprises an adjustable nozzle that can be selectively adjusted to control the quantity and direction of air flowing through the nozzle, the air distribution device further having an inlet fan in fluid communication with the passageway that draws air through

Appl. No. 10/756,820
Attorney Docket No. 5915 P 005
Page 5 of 10

the front permeable segment, wherein the air is ultimately expelled through the permeable segment of the rear door.

16. (Original) The cabinet of claim 15 wherein the vertical duct is positioned proximate the support structure.

17. (Original) The cabinet of claim 16 wherein the vertical duct is positioned between the side wall arrangement and the support structure.

18. (Original) The cabinet of claim 15 wherein the inlet fan is positioned proximate the support structure.

19. (Original) The cabinet of claim 18 wherein the inlet fan is positioned between the side wall arrangement and the support structure.

20. (Original) The cabinet of claim 15 wherein the front wall is a door with a lower permeable segment, and wherein the inlet fan is positioned to draw air through the permeable segment.

21. (Original) The cabinet of claim 15 further comprising a generally horizontal duct positioned between the inlet fan and the vertical duct, wherein the horizontal duct is in fluid communication with the inlet fan and the vertical duct.

22. (Canceled)

23. (Currently Amended) A cabinet [[for]] housing computer devices, the cabinet assembly comprising:

an internal chamber of the cabinet defined by a [[side]] wall arrangement having at least a front wall a front door with a lower permeable segment and a rear door with a

Appl. No. 10/756,820
Attorney Docket No. 5915 P 005
Page 6 of 10

permeable segment that constitutes a substantial area of the rear door, wherein the rear permeable segment permits air discharge;

a first and a second support structure within the internal chamber, wherein each support structure is configured to receive a plurality of computer devices; and,

a first air distribution device positioned in the internal chamber, the first air distribution device having a vertical duct defining a passageway, the first air distribution device further having a plurality of air discharge ports in fluid communication with the passageway wherein the discharge ports transmit air to the first support structure and wherein each discharge port comprises an adjustable nozzle that can be selectively adjusted to control the quantity and direction of air flowing through the nozzle, the first air distribution device further having an inlet fan in fluid communication with the passageway that draws air through the front permeable segment, wherein the air is ultimately expelled through the permeable segment of the rear door.

24. (Original) The cabinet of claim 23 further comprising a second air distribution device positioned in the internal chamber near the second support structure, the second air distribution device having a vertical duct defining a passageway, the second air distribution device further having a plurality of air discharge ports in fluid communication with the passageway wherein the discharge ports transmit air to the second support structure, the second air distribution device further having an inlet fan in fluid communication with the passageway.

25. (Original) The cabinet of claim 23 wherein the vertical duct of the first air distribution device is positioned proximate the first support structure.

26. (Original) The cabinet of claim 25 wherein the inlet fan of the first air distribution device is positioned proximate the first support structure.

Appl. No. 10/756,820
Attorney Docket No. 5915 P 005
Page 7 of 10

27. (Original) The cabinet of claim 23 wherein the vertical duct of the second air distribution device is positioned proximate the second support structure.

28. (Original) The cabinet of claim 27 wherein the inlet fan of the second air distribution device is positioned proximate the second support structure.

29. (Original) The cabinet of claim 23 wherein the front wall is a door with a lower permeable segment, and wherein the inlet fan of the first air distribution device is positioned to draw air through the permeable segment.

30-47. (Canceled)

48. (Currently Amended) A method of distributing air to a stack of computer devices within a cabinet, the method comprising the following steps:

providing a cabinet having an internal chamber defined by a [[side]] wall arrangement having a front door with a lower permeable segment and a rear door with a permeable segment that constitutes a substantial area of the rear door, the internal chamber having a stack of computer devices supported by a support rack;

providing a substantially vertical duct positioned within the internal chamber, the duct defining a passageway for air distribution wherein the passageway is in fluid communication with a plurality of adjustable discharge nozzles and an inlet fan;

drawing a quantity of air into the inlet fan through ~~a permeable portion of the sidewall arrangement~~ the permeable segment of the front door;

transmitting the air from the inlet fan to the passageway of the duct; [[and,]]

Appl. No. 10/756,820
Attorney Docket No. 5915 P 005
Page 8 of 10

uniformly distributing the air to a frontal portion of the computer devices by discharging the air from the passageway through the adjustable nozzles; and,
expelling air discharged from the computer devices through the permeable segment of the rear door.